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ABSTRACT

Educational research in Asia and Oceania is explored from the point of view of its effect on actual educational practices. Information is based on speeches and group discussion at a 10-day regional seminar held in Japan in 1979. This document--a report of that seminar--is presented in four chapters. In Chapter I, seminar objectives are explained, participants are introduced, and a general overview of agenda items is presented. Major objectives were to exchange information regarding educational research and reform in the various nations concerned and to discuss ways of promoting additional educational research. Agenda topics included review of major problems and issues of educational research in the participating countries, suggestions regarding new directions for educational research, and consideration and adoption of a final seminar report. In Chapter II, highlights of country research activities are presented for Afghanistan, Australia, Bangladesh, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Singapore, Socialist Republic of Viet Nam, and Thailand. In most countries, participants reported that educational policy decisions are still largely based on influences other than educational research. In Chapter III, new orientations in educational research are discussed and related to educational reform. Emphasis is placed on the need for: (1) a problem-solving approach to research, (2) interdisciplinary research, (3) more sophisticated methodology, (4) participation by teachers, and (5) more highly trained research personnel. In the final Chapter, suggestions are offered for linking educational research more closely with educational reform, including creating or strengthening national research organizations, convening regular regional educational research conferences, and identifying specific research needs arising out of educational reform action. (DB)

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UNESCO/APEID-NIER

REGIONAL SEMINAR ON EDUCATIONAL RESEARCH IN RELATION TO EDUCATIONAL REFORM IN ASIA AND OCEANIA

31 May - 9 June 1979

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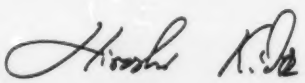
F O R E W O R D

It is indeed most gratifying for me as Director General of the National Institute for Educational Research of Japan (NIER) that such a significant meeting as the Regional Seminar on Educational Research in Relation to Educational Reform in Asia and Oceania was successfully held at NIER from 31 May to 9 June 1979 as a Unesco/APEID-NIER regional joint activity, in particular, in connection with the celebration of the thirtieth anniversary of NIER's foundation. I am very grateful to Unesco for having given NIER the privilege of hosting the Seminar.

This Report of the Seminar was prepared as the product of very fruitful and constructive discussions made by all the distinguished participants during the Seminar. I would like to express my sincere appreciation, in particular, to Mr. Raja Roy Singh, Director of the Unesco Regional Office for Education in Asia and Oceania at Bangkok, for his special contribution.

It is earnestly hoped that this Report will prove very useful in promoting educational research which will make better and more contributions to the implementation of educational reform not only in the region of Asia and Oceania but also in the other parts of the world.



Hiroshi Kida
Director General
National Institute for Educational Research
Tokyo, Japan

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CHAPTER I

INTRODUCTION

Background

The Fourth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and Oceania (Colombo, 24 July 1 - 1 August 1978) stressed the need for educational reforms and for relevant studies in education. One of the recommendations made by the Conference, addressed to the Member States of the region, invited them to "intensify research and efforts aimed at creating educational systems that are truly national in their working principles, structure, content and educational method, . . ." (Recommendation No. 12).

The Unesco General Conference, at its twentieth session, authorized the Secretariat, by its Resolution No. 1/5.4/1, to promote research on educational process, and to organize a regional seminar in Asia and Oceania for the purpose of examining the specific contribution of research in the preparation and implementation of educational reforms, and working out a programme designed to increase national capacity for producing educational materials.

Upon a request of Unesco, the National Institute for Educational Research of Japan (NIER), which has been conducting the Unesco-NIER regional programme for the promotion of educational research in Asia since 1967, hosted a Regional Seminar on Educational Research in Relation to Educational Reform as a joint activity with Unesco in co-operation with the Japanese National Commission for Unesco, within the framework of the Asian Programme of Educational Innovation for Development (APEID). The Seminar was held from 31 May to 9 June 1979 at NIER, Tokyo.

Objectives of the Seminar

The objectives of the seminar were as follows:

i) To exchange information and experiences with regard to the contribution of educational research to the implementation of educational reform; and

ii) To discuss ways to promote educational research activities in the region.

Participation

The following fifteen Unesco Member States in the region sent participants to the Seminar: Afghanistan, Australia, Bangladesh, India, Indonesia, Japan, Malaysia, Nepal, Pakistan, Papua New Guinea, Philippines, Republic of Korea, Singapore, Socialist Republic of Viet Nam, and Thailand.

Inauguration

The Seminar was inaugurated by Mr. Hiroshi Kida, Director General of NIER. Mr. Kida extended a very warm welcome to all the participants of the Seminar, and expressed appreciation and gratitude to the Member States and to Unesco for enabling NIER to host the Seminar. Mr. Kohei Shinozawa, Secretary General of the Japanese National Commission for Unesco, delivered a welcome address. Mr. Raja Roy Singh, Director, Unesco Regional Office for Education in Asia and Oceania, thanked the organizers and the participants, and stressed the significance of the Seminar. (The texts of the addresses are at Annex II).

Officers of the Seminar

The following were elected as officers:

Chairman:	Mr. Hiroshi Kida (Japan)
Vice Chairmen:	Dr. Bom Mo Chung (Republic of Korea)
	Mr. Viswanath Poddar (Nepal)
	Dr. Sippanondha Ketudat (Thailand)

Rapporteurs: Prof. R. P. Singh (India)
Dr. Eleanor T. Elequin (Philippines)

A steering committee was formed, composed of officers of the Seminar, the staff members of Unesco and NIER. The Steering Committee met five times during the Seminar. The drafting committee for the report of the Seminar consisted of the two rapporteurs, Prof. A. K. Singh (India), Dr. M. A. Bhatti (Pakistan), Dr. M. Flores (Philippines) and the staff members of Unesco and of NIER.

Schedule of Work

The main items of the agenda as adopted for the Seminar were as follows:

i) Review of the organization and development of educational research in the participating countries (country report presentation) and of major problems and issues;

ii) Review of ways of promoting new orientations in educational research, with particular reference to making them contribute to educational reform for development;

iii) Suggestions on promoting new directions for educational research in the region;

iv) Consideration of the draft final report; and

v) Adoption of the final report.

Documentation

The main documentation of the Seminar consisted of:

i) Reports on country research experiences by the participants; and

ii) Special papers on critical aspects of educational research in relation to educational reforms presented by some of the participants.

The Seminar coincided with the thirtieth anniversary of the foundation of NIER. Valuable documentation on Japanese experience and NIER's role and achievements in the field of educational research, presented in connexion with the anniversary, was available to the Seminar. The participants placed on record their felicitations to NIER on its anniversary.

Final Report

The draft of the final report was presented and adopted at the closing session on 9 June 1979, with the suggested modifications and corrections, which have been made in this final report.

The Seminar expressed its grateful thanks and appreciation to the National Institute for Educational Research for its generous support to and help in organizing the Seminar in co-operation with Unesco, and to the Government of Japan and the Japanese National Commission for Unesco for the courtesies and consideration extended to the participants.

CHAPTER II

HIGHLIGHTS OF COUNTRY EXPERIENCES

The review of the country reports, which deal with the organizational features in which educational research is conducted in the fifteen countries represented at this Seminar, revealed the similarities, variations within these general similarities, and differences. There is striking resemblance in patterns of research organizations and their development in several aspects, regardless of whether the countries have a long tradition of research activities or are only beginning to develop their facilities and capacities. The review took account of these similarities and then looked into the perceived patterns of dissimilarities, and related the strengths and weaknesses as articulated to the structural aspects of educational research.

Concept of educational research in relation to educational reform

The Seminar decided to take up a few key issues in order to clarify the nature of problems of educational research in relation to educational reform.

The Seminar discussed the concept of educational research from several angles. An attempt was made to distinguish between the terms 'educational research' and 'research in education. The latter was considered to be broad-based and much wider in scope than the former. Some participants questioned this distinction, and maintained that the two were identical, but should not be confused with psycho-pedagogical research. It was suggested that educational research, to be an effective basis of reform, should also include everything from classroom teaching to the philosophy of basic disciplines. It should be concerned with, in fact related to: (a) the processes of learning; the acquisition of knowledge; (b) skills, values and aesthetics within a specific socio-cultural setting; (c) the relationship

between socio-psychological changes and the redefinition and realization of the goals of particular societies at a particular time; and (d) principles, methods, content and materials for education of children, teachers, supervisors, administrators and those involved in out-of-school education. It was emphasized that research undertaking in all these aspects should be directly related to reforms so that the input of educational research would result in an overall progress of education.

Educational research, being more than mere pedagogy, should also include research in sociology, anthropology, economics and similar subject areas within the broader concept of education and its relevance to development.

Structural pattern

There are three main agencies which account for the total configuration of educational research: these are government departments and agencies, the university-based research bodies or institutes, and other relatively independent research institutes and centres.

The departments of Ministries in all the countries manifest a growing trend in emphasizing the research efforts to guide policy making and improve educational practice. Examples of this trend are the establishment of new structures with permanent, qualified and experienced personnel; merger of existing institutes; and creation of bodies with co-ordinating and regulatory functions. Governmental agencies, particularly those based in the Ministries of Education, are now playing a significant part in research because educational research is becoming more policy-relevant and decision-related to problems in planning, curriculum reform and support of language policies. Institutes, bureaux or centres within the ministries undertake in-house investigations and baseline surveys. In addition the ministries are also involved in the evaluation of existing practices (such as syllabi, programmes, achievements, methods, materials, facilities).

In many countries, government departments have considerable influence on the volume, direction and quality of research activities which are undertaken by other institutions with their financial support. Some government departments finance projects or commission studies to universities, support visiting researchers to work on research projects, or engage them as consultants in projects which they sponsor.

In some countries, university-related structures and facilities have played a vital role in the overall pattern of research activities, particularily of the interdisciplinary type and related to national problems of development, while university faculties continue to do independent research along their disciplinary areas of interest in the context of expanded graduate programmes.

The main thrust of researches in quite a few countries was aimed at attacking the twin issues of poverty and equity. Research findings in the designated priority areas are conceptualized to provide feed-back into two other functions, namely, teaching and and community service, and to improve their quality and provide them relevance. The growth in funds for the support of research has created problems for the university system and such basic issues as the balance among the three-fold functions - teaching, research and extension. A system of grants-in-aid and professonal chairs offers flexibility in the choice of individual research projects.

A variation of institutional arrangements is apparent where existing colleges of education have been converted into institutes of education and research, in which research wings have been established for undertaking institutional research and collecting bench-mark data for planning purposes. In some countries where the Ministries of Education have had a late start in developing educational research as an in-house activity, findings of large-scale research paved the way for initiating such an activity. In other countries, where there is a history

of working relationship between the universities and ministries, there are parallel research structures in both organizations, with the university research staff co-opted or commissioned for the research requirements of the Ministry.

Another feature in the pattern of the organization of research is the relatively independent research bodies which enjoy a large measure of autonomy, closely associated with government or the universities. Most countries have set up such institutions.

Some countries have research organizations maintained at the national, state/regional, district (prefectural) and local levels. In addition, councils, professional associations, colleges of teacher education, universities, and the privately financed and/or internationally funded research organizations also undertake research for educational reform.

Inter-country and inter-institutional collaborative mechanisms have been established in several countries largely for the purpose of relating research to general development goals.

Types of research activities

In view of the need to collect and analyse data to support planning and policy decisions, a variety of research projects are being undertaken in the countries. Illustrative examples are: baseline nation-wide studies in the cognitive learning effectiveness; relationship between social disadvantage and educational achievement; evaluative studies explaining the decline in enrollment in rural secondary schools; the reduction of attrition rates in primary education; the streaming of pupils into two or three year pre-university programmes; a survey of the attainments in the Chinese language by children belonging to average ability levels in the Chinese and English schools; collation of anthropometric data on pupils, students and others. The administrative type of research is primarily concerned with collection of data about the number and location

of educational institutions by types and levels, student enrollment, number of teachers by levels and qualifications, projections of student population and future numerical requirements of teachers, analysis of examination results and the like. Some specialized research institutes are assigned specific research topics such as cultural and anthropological studies and co-operative action schemes with international institutions with similar functions. Other specialized content areas are goals, aims, content and methodology of education for the primary and middle school levels, broadcast programmes and projects commissioned for population education, air and correspondence education, and the vocational/academic tests. There is also basic research which attempts to tackle the problems of a basic nature such as identification of learning difficulties in school and the evaluation of community extension activities.

New directions of reform related to educational research

Differences among the countries can be identified with respect to the inter-relationship of organizational patterns, the foci of research activities, and the extent to which research resources are utilized.

There is an evidence of:

i) Increasing concern for focusing research efforts under somewhat different priority areas in each country;

ii) Awareness of the need for inter-sectoral and multi-disciplinary research efforts to bear on educational reforms;

iii) Need for more communication and systematic control regarding the output of research among the research associations;

iv) Need for maximizing the use of manpower resources including tertiary students in field research and involvement of researchers at all stages of the reform processes, and

v) Concern for the use of other tools as an alternative to the questionnaire and micro-level research vis-a-vis large scale research.

This section lists priority areas and/or concerns drawn from the country reports. Methodological, procedural and substantial gaps in the present research outputs can be deduced from the list which includes only the broad areas without specific details. The list implies a variety of national perspectives and the country experiences in their approaches to national problems. Most of the suggested projects, conceptualized as links between research and reform, may be classified into applied research projects, development projects, production projects and basic research projects.

Countries	Categories of research concerns and proposed projects
Afghanistan	i) Quality and quantity of educational research activities;
	ii) Creation of units and divisions under a centralized policy-making body;
	iii) Improvements of staffing and facilities of research units;
	iv) Priorities for applied and adaptive research vis-a-vis pure and methodological research.
Australia	i) Policy studies;
	ii) Comparative studies;

	iii)	More disciplines to bear on educational issues;
	iv)	Curriculum development and evaluation studies;
	v)	Research arising from social change;
	vi)	School-community relationship.
Bangladesh	i)	Establishment of a structure (bureau or institute) for educational research with appropriate functions;
	ii)	Freedom in the selection of areas of research particularly to be focused on innovation in educational research, optimization in the management of research and use of systems approach in conceptualizing research designs;
	iii)	Socio-economic and cultural variables associated with education and development.
India	i)	Research on teacher education such as micro-teaching, distance learning, competency-based teacher education programmes;
	ii)	Curriculum development and examination reform;
	iii)	Impact of nutrition on learning;
	iv)	Social disadvantage and educational achievement.
Indonesia	i)	Curriculum development projects (Development School Pilot Projects);
	ii)	Instruction managed by parents, community and teacher (IMPACT project - PAMONG);

iii) Open junior high school project;

iv) Teacher education reform project;

v) Research network development project;

vi) Test development project;

vii) Cognitive development study;

viii) Readability study;

ix) Comparative study on student achievement using different curriculum systems.

Japan

i) More joint projects rather than individual studies within an institute, i.e., visiting researcher scheme;

ii) Curriculum development studies;

iii) Education for special target groups;

iv) Lifelong education, computer-assisted instruction, admission research (special topics).

Malaysia

Priority is given for small-scale, problem-orientated researches with the aim to improve the quality of education. The researches are in the fields of:

i) School administration;

ii) School curriculum;

iii) School discipline;

iv) School facilities;

v) School financing;

vi) Teaching and teaching aids;

vii) School academic performance.

Nepal	i)	Content and quality of education; preparation of low cost materials, effectiveness of teacher training programmes; educational opportunities for the socially disadvantaged groups; and efficiency and cost-benefit analysis approach;
	ii)	Problem-oriented research involving those who will implement the findings;
	iii)	Use of simple and understandable research techniques;
	iv)	Inexpensive and short-term project design.
Pakistan	i)	Integrated approach to education;
	ii)	Identification of issues, needs and problems (macro-level);
	iii)	Impact studies;
	iv)	Special topic studies;
	v)	Comparative studies;
	vi)	Effectiveness of teaching-learning;
	vii)	Educational facilities, standards, policies and programmes;
	viii)	Educational innovation;
	ix)	Special education;
	x)	Guidance and counseling;
	xi)	Test development and improvement of examinations.
Papua New Guinea	i)	Use of anthropological field methods on learning processes;
	ii)	Field work using tertiary students;
	iii)	Mechanisms for integrating research and development using researchers in the

		processes of planning, implementing and evaluating reforms;
Philippines	i)	Democratization of and access to education;
	ii)	Literacy studies;
	iii)	Studies to support the bilingualism policy;
	iv)	Accreditation and equivalence programmes;
	v)	Higher education: productivity projects, equity projects, excellence, efficiency and effectiveness projects;
	vi)	Elementary education: Curriculum and instruction, drop-out studies, delivery systems, need-assessment surveys, teacher retraining, incentives, special education, educational technology and monitoring system.
Republic of Korea	i)	Curriculum development;
	ii)	Development of audio-visual materials and low-cost teaching aids;
	iii)	Wider dissemination of research findings and co-operative research activities;
	iv)	Systematization of research activities by conference members and/or research associations.
Singapore	i)	Effective management information system with planning parameters;
	ii)	School data banks to assist planning of manpower and physical facilities;
	iii)	School surveys.

Socialist Republic of Viet Nam	i)	Instructional materials preparation;
	ii)	Technical facilities projects;
	iii)	Problems at the district level in relation to educational development plans for comprehensive educational management, career guidance, teaching methods and assessment of studies;
	iv)	Educational and scientific studies: early childhood education, psychological development of children, methodological studies in science and mathematics.
Thailand	i)	Better use of action-research, particularly in educational administration;
	ii)	Test research associated with curriculum;
	iii)	Use of observation and interview to replace the questionnaire.

Improving linkage between research and educational reform

In most countries, judgemental decision making plays a more important role in educational reforms than decisions derived from educational research. However, there is a growing awareness to strengthen educational research for decision making.

There was considerable discussion about relative priorities as between small research projects and large-scale research projects. Some participants considered small-scale researches to be more useful than large-scale researches on the ground that an in-depth study was possible in the former. However, some participants maintained that large-scale researches are needed for some specific objectives of an educational reform. The general view was that there was no basic conflict between small and large-scale researches. Adoption of one or the other

strategy would depend on the need and objectives of the research, and ultimately the research should serve to increase public understanding for research-based reforms. The importance was emphasized of creating understanding of educational research on the part of the general public, administrators and politicians in order to promote research-based educational reforms.

The Seminar was of the opinion that at present a large number of researches are concerned with only collection of facts rather than trying to discover interrelations among facts, that is relating facts with facts meaningfully. The researches should try to relate educational data with explanatory concepts and variables which could serve as useful bases for educational reforms.

Various forms of linkages may occur when research is associated with the policy formulation level and articulated through the planning and implementation stages by involving those who need to be involved at such level. It also can occur when research performs the twin functions of legitimizing reform or improving efficiency. Research and development institutions and various committees at the ministerial level may be utilized for policy formulation to undertake educational reforms based on research findings. Creating a unit specifically for a research priority area and staffing a unit with research personnel is another strategy.

A review of the experiences of the participating countries highlighted the need for increasing awareness and recognition of educational research to societal needs and goals.

In countries with three-tier governmental administration (that is, the national or federal, provincial or state, and local or municipal), the decisions which affect education or educational reform have to be taken at all the three levels. Research should have a positive function to perform at all these levels in relation to educational policies which are laid down by the

politicians and implemented by administrators. It was agreed that educational research could contribute to informed decision making at all levels: policy research for the decision makers; strategy research for institutions; and tactics research or action research for implementation at the classroom level.

It was recognized that the relation between politics and education is very close because both are facets of the social system. Political considerations influence educational reforms, both positively and negatively. An educational reform, even if indicated by educational research, may not be legislated if it is considered 'politically risky'; or a reform programme may not be subjected to evaluation lest its shortfalls be exposed. It is necessary that in the conception and implementation of educational reforms, there is a dialogue between professional researchers, administrators, as well as politicians. Publication of educational research findings should be written in non-technical language for the public so that a climate of opinion favourable to research is created in legislative and policy-making processes.

The Seminar discussed some of the problems which are encountered in the development of educational research in support of educational reforms for development. First, there is the financial problem arising out of quite inadequate funds which are available for research. At times this problem is compounded by the fact that for lack of a well-considered research policy, financial resources tend to be frittered on ad hoc and small projects with little impact potential. Secondly, there are problems of organization. Inadequate facilities for research, lack of library support and access to research information, all these add up to a considerable barrier to the development of research. Thirdly, there is a question of research workers. The training facilities are at present quite inadequate, and the training programmes tend to be

narrowly statistical, rather than broadly based on the methodologies of social sciences.

CHAPTER III

NEW ORIENTATIONS IN EDUCATIONAL RESEARCH FOR RELATING IT TO EDUCATIONAL REFORM

The review of experience in the countries presented in Chapter II would show that the role of educational research in educational reform is becoming increasingly positive. It cannot however be claimed that educational research at present is indispensably related to educational reform process, or that educational reform is research-based. Broadly speaking, the influence of educational research is still quite weak in the conception of educational reform; it is more positive in translating some reform measures into action programmes (for example, curriculum development or development of instructional materials); and again in implementation, its role has yet to make itself felt.

Educational research and educational reform: Divergences

There are different reasons for the lack of a more positive relationship between educational research and educational reform processes. First, a comprehensive educational reform derives its motivation from a large variety of sources: political; social, economic as well as pedagogical. Educational research, in its traditional form, has not explored these broader perspectives. Educational reform is not merely an academic process; it is first and foremost a social process. Then, there is also a difference in the time horizons within which educational reform action and educational research seem to operate. The longer time horizons of educational research do not quite fit into the urgencies in which educational reforms are generally conceived and introduced for implementation. Furthermore, empirical research data are not yet available on different aspects of educational actions which are covered by educational reform. Even in cases where data are available, they tend to be of a kind

which can be interpreted in different ways. The findings of educational research present a picture of random jottings rather than of a guide map. Clearly a unified interpretation and re-interpretation of educational research findings in relation to the problems of educational development in a country should be promoted as an integral part of the promotion of educational research.

Need for new orientations

The Seminar stressed that in order to enhance the role of educational research in educational reform, educational research would need to develop new orientations.

Problem-solving

First and foremost, educational research would need to be consciously designed to solve problems. Not all problems in educational development, particularly where such educational development is conceived within the broader framework of national development, are amenable to research, but a considerable range of problems cannot be solved other than through the application of scientific research methods and procedures. To call for greater problem orientation in educational research is not to raise once again the discussion-worn question of "pure" and "applied" research. The Seminar considered this question, and was of the view that the distinction between pure and applied research could not be sharply made. Research called "pure" because it was undertaken out of sheer intellectual curiosity and the urge to know found, more often that not, its full scope in applied forms. Numerous instances exist where basic researches have led, in their applied forms, to historic changes.

Interdisciplinarity

Another important aspect of educational research on which the Seminar laid much stress was interdisciplinarity. Education,

and particularly education related to development, is essentially multi-disciplinary in the sources of its knowledge, insights and understanding. The traditional form of educational research has tended to be narrow in its outlook and scope. Problem-oriented research has to bring together the insights from a variety of disciplines. Interdisciplinary research in education would therefore need to develop appropriate organization forms (team research) as well as research procedures which will ensure bringing together specialists from different related disciplines in a coherent manner. At the institutional level, such team research would call for appropriate procedures for inter-institutional co-operation, and promotion of understanding among research workers drawn from different disciplines. Inter-institutional co-operation is highly important. Such co-operation will be necessary at several levels. In countries where education is in the charge of several ministries, inter-ministerial co-operation would be necessary for educational research. Then co-operation would be necessary among institutions at different levels and jurisdictions, for example, universities, ministries of education, research institutions.

The Seminar was of the view that Unesco and other concerned international organizations could help in promoting educational research by facilitating inter-country exchange of research personnel. The Seminar also stressed the importance of developing and disseminating educational research information, both at the national and international levels.

Methodologies

For the methodology of educational research to be responsive to the requirements of educational reform, there is need for a reorientation which will identify research priority areas that provide understanding of behaviour in the society of which researchers are a part. Educational research, as it is now practised, has emerged from the research writings of scholars who are more familiar with Western societies and cul-

tures, and the transplantation of these methodologies poses a problem in the selection and designing of research tools and techniques. The educational research techniques and tools in the countries of the region are still adaptations or adoptions from outside. There is, therefore, a need to encourage critical evaluation of their appropriateness to the research problems at hand.

Participatory research

The uneven development of educational research in relation to educational reform has given rise to a problem common to many countries. The quality of educational research reflects an uneasy compromise between search for relevance and the desire to achieve 'rigour' in the application of quantitative methods. One development of special importance is the growing number of teachers who are being given the opportunity to participate in research projects and to generate their own topics for research under academic supervision. Teachers are taught the skills which they are expected to use. They, however, need to be made aware of educational research activities that are called for in projects which lead to reform. Such teacher participation provides an opportunity to the educational researchers for discussing and testing the practicality of tools and methods incorporated into the design of research. While the teachers get an opportunity for learning, the educational researchers also have a chance to participate in the everyday realities at the school level and redefine their roles in national development. Thus the major role of educational research becomes one of demonstrating that a scientifically disciplined approach to the analysis and understanding of behaviour in a human setting can promote open-mindedness and problem solving attitudes where the conceptual tools accept multiple belief systems within a rational framework. Educational research must take note of the fact that education is first and foremost human relationship the human responses.

Training of education research personnel

As the purpose, scope and methodologies of educational research get reoriented to the mission of educational development, reform and renewal, the training of research workers assumes primary importance. The Seminar discussed the existing methods of preparing research workers, and was critical of them. Much of the training programme was limited to quantitative methods of testing and measurement, with few opportunities for introduction to the broader perspectives of social sciences. Furthermore, little account was taken of the fact that a research team requires a combination of scholars with a broad background and scholars who have specialized in specific areas.

The development of the indigenous capacities of the countries to prepare their research personnel should be a matter of priority concern in national educational policies. The present almost total reliance, in many countries, on external training programmes for educational research workers, has undoubtedly contributed to the lack of strong and positive correlation between educational research and educational reform.

The Seminar strongly recommended that the training programmes for educational research workers should be carefully reviewed and reformed. It is important that the young research scholar should be given a good grounding in the methodologies of social sciences and also have the opportunity of direct participation and involvement in a research project. The discipline of educational research should surely be seen to include a keener awareness of the time horizon within which educational action for development, innovations and change takes place. The Seminar urged that Unesco take leadership in the region in promoting the training of educational research workers through assistance in appropriate form to national activities as well as by a regional programme of training including the development of suitable guides/manuals.

Areas for interlinking educational research and educational reform

As mentioned earlier in this report, the inter-relationship of educational research and educational reform has so far been mainly in the area of curriculum development and instructional methods and materials. The Seminar was of the view that the positive role of educational research in educational reform has to be manifested, and new orientations developed, in the following three areas:

i) Educational research in the area of educational planning and decision making;

ii) Educational research in the area of educational administration and management;

iii) Educational research in the implementation of educational reform including evaluation of educational reforms.

Educational research and educational planning

The linkage between educational research and educational planning should ensure a deepening of the content of educational planning as well as a more effective implementation of educational plans. The deepening of the content of educational planning will be reflected in educational planning goals as well as in improvement in the quality of education. In the developing countries of the region, baseline studies and need assessment studies are not available, and this severely limits the range of educational planning.

Another important development in educational planning in many countries in the region is reflected in increased local planning. The earlier educational planning was highly centralized. The emphasis is now on planning at the local level within a decentralized framework. Local/participatory planning as a strongly emerging trend should be closely linked with educational research

addressed to problems of communication flows in the national/ local framework.

Educational research and educational management

The Seminar was of the view that the purpose of linking educational research and educational planning is both to improve the performance of the education system as a whole, and also to improve the educational gains of individual learners in the classroom and other forms of learning situation. This links educational planning with the management of education.

The Seminar discussed the new dimensions of management in the kind of education which is designed for development purposes. The general view was that in the education systems of the countries of the region, management presents the weakest feature. It is heavily preoccupied with administrative procedures at the expense of improvement measures for educational processes and products. Educational research should be directed to those aspects of management which help in replacing ad hoc and rule-of-thumb or precedented-based procedures by informed and systematic judgement. Such educational research-educational management linkage should be conducive to creating a climate receptive of change.

All too often management in education is equated exclusively with management of schools and classrooms. The Seminar emphasized that management of education, and indeed any reference to an education system, should be doomed always to include the other forms of learning which are subsumed comprehensively in the term 'non-formal education'. Educational research in management, therefore, is related to this whole system of both formal and non-formal modes of education.

Educational research and implementation of educational reform

Management is closely linked with implementation. There are certain aspects of implementation of educational reform in which educational research is playing a significant role. But there

are other aspects in which it has yet to make its influence felt.

The Seminar discussed in considerable detail the strategies which have been found useful in implementing educational reforms. In one approach, an educational reform is implemented in stages beginning with a pilot phase and broadening out in subsequent stages, each of which embodies the lessons learned from the prior stages. This strategy is operable in long time-spans. The other approach is a mass one where the momentum created by the very size of the endeavour ensures dynamism. Educational research in this strategy of implementation can play a crucially important role in ensuring the effectiveness of educational reform action. An important mission of educational research is to identify and assess the conditions and requirements for carrying out a reform programme.

The participants described the role of educational research in the evaluation of educational reforms in their countries. Contrary to what one might have expected, educational research is not playing a visibly significant role in the evaluation of educational reforms. In all countries in the region, educational reforms of varying magnitude and scope have been introduced and implemented in the last two decades. But studies evaluating the outcome of these reforms are few and far between. The reasons for this state of affairs range, on the one hand, from the reluctance of those in authority who may have introduced any educational reform to have it systematically evaluated, to, on the other hand, the difficulty of devising appropriate methodologies for evaluating a massive educational reform.

Evaluation of educational reform will, it was considered by the Seminar, take different forms. It would have to have a monitoring system spanning the course of the reform. Caution has, however, to be observed in fitting the monitoring system to the nature of the task. Evaluation is essentially to improve, and not to prove or disprove. Examples are well known in the Asian countries when the monitoring system, devised mainly under external prompting and influences, was so heavy, unwieldy and complex that it

became a drag on the implementation of educational reform. In addition to a monitoring system, there would also need to have summative project evaluation, which is rather simple to conduct (but difficult to report).

One of the participants presented to the Seminar an interesting account of how a 'quasi-experimental research design' is built right from the start in the overall design of an educational reform programme. This 'quasi-experimental design' can provide automatic evaluation data on the educational reform as it takes its course.

Educational research in the evaluation of educational reforms is an area in which Unesco's assistance would be timely. It could take the form of a series of regional workshops for the development of the designs and methodologies co-operatively by the participating Member States in the region, and provision of advisory services to and support for national-level evaluative studies.

CHAPTER IV

SUGGESTIONS AND RECOMMENDATIONS

The deliberations and discussions of the Seminar on linking educational research to educational reform led to the formulation of certain suggestions and recommendations which the Seminar strongly commends to the Member States and to Unesco.

Linking educational research and educational reform action

It is recommended to the Member States that:

a) A suitable national organization be created, if one does not already exist, for promoting educational research in relation to educational development, for planning and carrying out problem-oriented research programmes in association with other suitable organizations within the country (for example, universities), providing funding support for such studies, and disseminating the findings of educational research;

b) Regular conferences be organized at the national level to promote awareness and understanding of the contribution of educational research to educational reform and development;

c) The development of self-sustaining indigenous research capacity be an important goal of educational planning for development.

It is recommended to Unesco that:

a) As a follow-up of the present Seminar which has proved highly beneficial to the participating countries, provision be made in Unesco's programme and budget for 1981-1983 for regional workshops focused on

i) Educational research in relation to the management and evaluation of educational reform;

ii) Educational research in non-formal modes of education;

iii) Educational research in universalization of educational opportunities at early school stage;

iv) Interdisciplinary research in education.

To the maximum extent possible, the regional workshops be based on the research projects and studies carried out in the participating countries.

b) A study be made in co-operation with the Member States in the region to identify the specific research needs arising out of educational reform action. Such agenda of research needs may be considered by the Standing Advisory Committee for Unesco's regional educational programmes in Asia and Oceania which Unesco proposes to establish in 1980 in pursuance of the recommendation of the Fourth Regional Conference of Ministers of Education (MINEDASO IV, Colombo, July 1978).

Training of educational research workers

It is recommended to the Member States that:

a) With a view to developing self-sustaining research capacity in each member country, training of educational research workers be given high priority;

b) The available training programmes be carefully reviewed to assess their relevance and appropriateness to the national conditions and needs;

c) Measures be taken in appropriate institutions in the countries to introduce training of research workers, where such provision does not exist. The national organization recommended in para. 2 (a) above be also

charged with training functions, wherever appropriate;

d) Programme of internships of research workers is recommended as particularly useful in the training of researchers.

It is recommended to Unesco that:

a) It initiate in its programme and budget for 1981-1983 a regional training programme for educational research workers focused mainly on providing training experiences to young research workers, and the development of literature (for example, training guides/ manuals) suitable to Asian conditions;

b) Provision be made for 'attachments/internships' for young research workers from one country to be able to work on research projects in another country, as a part of practical training. A parallel scheme of attachment is in operation in APEID;

c) Mobile training teams in educational research be established and their services be provided to the Member States on request.

(Note: At present such mobile training teams are operating most usefully in the Asian region in educational technology, agricultural education, and curriculum development.)

Collection and dissemination of educational research information clearing house activities

It is recommended to the Member States that:

a) Suitable arrangements be made for developing at the national level an educational research information system and data bank, using wherever possible an existing national institution/organization.

It is recommended to Unesco that:

a) Assistance and support may be provided by it and by other interested international organizations to the Member States, at their request, for developing their national information systems/data banks on educational research;

b) The documentation and information services provided by Unesco Regional Office at Bangkok and by ACEID be strengthened in the area of educational research and to facilitate flow of educational research information and to provide advisory services to the Member States.

Inter-country collaboration in educational research

It is recommended to Unesco that:

Assistance be provided, beginning if possible in 1980, for educational research workers to undertake study visits to other countries in the region and exchange experiences and insights from their direct participation in educational research projects related to educational reform.

Regional co-operation in educational research

The Seminar places on record its deep appreciation of the contribution that the National Institute for Educational Research (Tokyo) has made, and the support it has provided over a number of years, to regional co-operation in educational research in Asia and Oceania, and recommends its continued co-operation, support and help in the future programmes also.

The Seminar acknowledges with appreciation the offer of the participant from India for associating his organization (National Council of Educational Research and Training, New Delhi) in regional collaborative programmes in educational research.

ANNEX I

LIST OF PARTICIPANTS

I. Participants

Mr. Mohammed Jan Safi	President Primary Education Department Ministry of Education Kabul Afghanistan
Mr. S. S. Dunn	Chairman Educational Research and Development Committee 4th Floor M.L.C. Tower Woden, A.C.T. 2606 Australia
Mr. Mohammad Nural Islam	Principal Teacher Training College, Kotbari Comilla Bangladesh
Prof. R. P. Singh	Member-Secretary Educational Research and Innovation Committee National Council of Educational Research and Training Sri Aurobindo Marg New Delhi - 110016 India
Prof. Amar Kumar Singh	Head Post Graduate Department of Psychology Ranchi University Ranchi - 834001 Bihar India

Mr. Soedijarto	Head Centre of Curriculum Development Department of Education and Culture Jalan Jenderal Soedirman Senayan Jakarta Indonesia
Mr. Hiroshi Kida	Director General National Institute for Educational Research Tokyo Japan
Mr. Hideo Ohashi	Director Research Centre for Science Education National Institute for Educational Research Tokyo Japan
Dr. Sozaburo Ono	Director Science Educational Institute of Osaka Prefecture Osaka Japan
Mr. Chong Nock Rhee	Instructor National Institute of Education 25-1 Samcheong-Dong, Chongro-ku Seoul Republic of Korea
Dr. Bom Mo Chung	President Chungbuk National University Cheongju, Chungbuk Province Republic of Korea
Mr. Che Mat Ashari	Head of Data Bank Unit Educational Planning and Research Division Ministry of Education Examinations Syndicate Building Jalan Duta Kuala Lumpur 11-04 Malaysia

Mr. Viswanath Poddar	Joint Secretary Planning Division Ministry of Education Keshar Mahal Kathmandu Nepal
Dr. M. A. Bhatti	Joint Educational Adviser Ministry of Education Government of Pakistan Islamabad Pakistan
Mr. Ephraim T. Apelis	Teaching Fellow Educational Research Unit University of Papua New Guinea Port Moresby Papua New Guinea
Dr. Miguela Flores	Assistant Director National Testing Centre Ministry of Education and Culture Appoceros, Manila Philippines
Dr. Eleanor T. Elequin	Director Office of Research and Development College of Education University of the Philippines Quezon City Philippines
Mr. Lim Chee Lin	Planning Officer Ministry of Education Kai Siang Road Singapore
Dr. Thanoo Swaengsakdi	Deputy Director General Educational Techniques Department Ministry of Education Bangkok 3 Thailand
Dr. Sippanondha Ketudat	Secretary General National Education Commission Sukhothai Road Bangkok 3 Thailand

Dr. Tran Thuc Trinh	Scientific Secretary General Institute of Educational Sciences Hanoi Viet Nam

II. Unesco

Mr. Raja Roy Singh	Director Regional Office for Education in Asia and Oceania (ROEAO) and Regional Co-ordinator of Unesco's Programmes in Asia and Oceania Bangkok
Dr. G. Vaideanu	Chief Section of the Structures and Content of Education Paris
Dr. A. Latif	Chief The Asian Centre of Educational Innovation for Development (ACEID) ROEAO Bangkok
Mr. R. Watanabe	Assistant Programme Specialist ACEID Bangkok
Miss Charatsri Vajrabhaya	Assistant Programme Specialist ACEID Bangkok

III. Observers

Mr. Susumu Shibanuma	School Supervisor Elementary & Secondary Education Bureau Ministry of Education, Science & Culture Tokyo Japan

Mr. Yoshiro Egami	Director Planning Division National Institute for Special Education Kurihama Kanagawa-ken Japan

IV. Secretariat

Mr. Taichi Sasaoka	General Co-ordinator of Planning and Research
Dr. Kihei Koizumi	Chief Section for Educational Co-operation in Asia External Service Department
Mr. Toshio Kanaya	Co-ordinator of Research and Planning
Mr. Miharu Kajita	Section for Educational Co-operation in Asia
Mr. Nobuya Higuchi	Ditto.

ANNEX II

Address by Mr. H. Kida, Director General of NIER

Honourable Guests, Distinguished Participants of the Seminar, Ladies and Gentlemen:

It is indeed a great honour and pleasure for me to have this opportunity to express my greetings at the opening of the Regional Seminar on Educational Research in Relation to Educational Reform in Asia and Oceania, which is organized as a Unesco-NIER joint activity. All of us at NIER are very happy to be able to host this very important Seminar.

Especially we feel it very significant that the Seminar is organized when we at NIER celebrate the thirtieth anniversary of our foundation. We are very grateful indeed to Unesco and the Japanese National Commission for Unesco for having given us the privilege of hosting the Seminar. Without their assistance it would have been impossible for us to do so.

Now I would like to extend my very warm welcome to all the distinguished participants who have come a long way to Tokyo to attend this Seminar. I would like also to express my deep appreciation and gratitude to Mr. Raja Roy Singh, Director of Unesco Regional Office for Education in Asia and Oceania as well as Dr. Vaideanu, Chief of the Section for Educational Structures and Content at the Unesco Headquarters in Paris, for being with us at the Seminar. I am also very grateful to Mr. Shinozawa, Secretary General of the Japanese National Commission for Unesco and Director General of the Science and International Affairs Bureau at the Ministry of Education, Science and Culture, for his presence at this opening ceremony of the Seminar.

Ladies and Gentlemen, needless to say, the importance of educational research for educational administration and for

educational reform is widely recognized. Stressing this importance, in particular, Unesco proposed the organization of this present Seminar two years ago in its draft programme and budget for the biennium 1979 and 1980. Then it was approved by the Unesco General Conference at its 20th Session in 1978. Also during the course of deliberations at the Fourth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and Oceania held in Colombo last year, needs of educational reforms and of relevant studies and research in education were repeatedly stressed.

NIER was founded thirty years ago with the aim of conducting educational research which would be needed for the successful implementation of educational reform in this country after the Second World War. Now it is time for us to examine what we have been doing in the past thirty years and to start anew to make our research really relevant and useful for the improvement of education, not only in Japan, but also in other parts of the world.

Within the country, during the last thirty years, we have tried to strengthen our collaboration with the National Federation of Educational Research Institutes in Japan, which consists of about two hundred members scattered all over the country. Our goal is that useful research may be conducted through this network, meeting the real needs of the country, both at the national and the local levels. At the same time we have been participating in international research projects of various kinds recently. We would like to promote our efforts in this field much more in the light of rapid internationalization of education and culture in recent years.

Ladies and Gentlemen, as you may know, NIER has been implementing the so-called Unesco-NIER regional programme for the promotion of educational research in Asia since its inauguration in 1967. Within the framework of this programme, we have organized so far a number of significant regional seminars and

workshops. We are very proud of having in almost all the Unesco Member States in Asia and Oceania more than five hundred alumni members of NIER who have participated in our Unesco-NIER joint activities.

Particularly since 1974, when the Asian Programme of Educational Innovation for Development began its activities, most of our Unesco-NIER joint activities have been organized within the framework of APEID. So is our Seminar on educational research this time.

As you all know, the Seminar has two objectives: first to exchange information and experiences on educational research; and second, to discuss ways of promoting educational reseach activities in the region. I strongly feel that this Seminar is very significant and also very timely, in many ways.

As Director General of NIER, I am always trying to make our research activities relevant and useful for the improvement of education. However, there are many difficult problems to be solved before we can be really successful in achieving our goals and objectives. I am hoping that I will learn a lot from experiences of the participating countries and the deliberations of the Seminar.

Ladies and Gentlemen, as you have already been informed, NIER is going to observe tomorrow the thirtieth anniversary of its foundation day. All of you are cordially invited to join us in the anniversary celebration. We feel greatly honoured to have you with us on this occasion.

In concluding my remarks now, may I assure you that NIER will do as much as possible in order to make your stay in Japan, even though very brief, both very enjoyable and very fruitful. I sincerely wish you a big success in the Seminar.

Thank you.

Address by Mr. K. Shinozawa, Secretary General of the Japanese National Commission for Unesco and the Director General of Science and International Affairs Bureau, Ministry of Education, Science and Culture

Our friends from Asia and Oceania, Ladies and Gentlemen:

It is a great pleasure for me to be with you this morning at the opening session of the Regional Seminar on Educational Research in Relation to Educational Reform in Asia and Oceania. On behalf of the Japanese National Commission for Unesco, may I extend my warmest welcome to all eminent participants from Unesco member countries in this region and Unesco, in particular Dr. Vaideanu from Unesco Headquarters, Mr. Raja Roy Singh from Regional Office for Education in Asia and Oceania, and many distinguished observers who gathered here.

As you may be aware, the Seminar has significant meaning for two reasons. Firstly, as you may agree, education of today is faced with many difficult problems in a rapidly changing society. All these problems are necessarily complex in nature and require careful analysis before tackling, and therefore the important role of educational research in supporting educational reform cannot be too over-emphasized. However, the outcome of educational research would be much more fruitful if it would be achieved by international co-operation. In this regard, this Seminar, which is based upon the deliberation and the recommendation of the Fourth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and Oceania which was held at Colombo last July, is a timely endeavour indeed.

Secondly, this Seminar will be a memorable one for the National Institute for Educational Research, since it coincides with the 30th anniversary of the establishment of this distinguished institution. NIER was established in 1949, and

since then, it has contributed in the development of the Japanese education significantly through various excellent researches. Mention should also be made on the fact that NIER has played a central role in international co-operation in the field of education. Since 1977, it has been an Associated Centre of APEID, and its contribution to the development of education in Asia and Oceania has been highly appreciated both inside and outside Japan.

In view of the above, I should like to express my conviction that this Seminar will be another milestone in the NIER's effort to further international co-operation.

Finally, I shall conclude my brief statement by wishing that this Seminar will bring out concrete results and will mark a beginning for further progress in regional co-operation in this field.

Thank you.

Address by Mr. Raja Roy Singh, Director, Unesco Regional Office for Education in Asia and Oceania and Regional Co-ordinator of Unesco's Programmes in Asia and Oceania

Mr. Hiroshi Kida, Director General, NIER
Mr. Shinozawa, Secretary-General, Japanese National Commission for Unesco

Distinguished Participants, Ladies and Gentlemen:

It is a privilege as it is an honour for me to extend to the distinguished participants a most cordial welcome to the Meeting on behalf of Unesco, its Regional Office at Bangkok and the Asian Centre of Educational Innovations for Development. I should like also to express on behalf of Unesco and my personal behalf our deep appreciation and thanks to the National Institute of Educational Research (Japan), its distinguished Director General and its band of dedicated scholars for joining hands with Unesco Regional Office for Education and the Asian Centre of Educational Innovations for Development in organizing the present Meeting and hosting it, and to the Japanese National Commission for Unesco and the Ministry of Education of the Government of Japan for their unvarying support and co-operation. We are grateful also to the governments of the Member States in Asia and Oceania for their response and co-operation in making it possible for so many distinguished educators, researchers and educational pioneers to be at the Meeting with us today.

For nearly a decade now, our host, the National Institute of Educational Research (NIER), and the Japanese National Commission for Unesco have worked closely with Unesco in promoting a co-operative regional programme, the main focus of which has been educational research and development. In October 1972 was held here at NIER the first Regional Meeting on Educational Research and Development in Asia. Since the initiation of the Asian

Programme of Educational Innovations for Development (APEID), the regional co-operative programme is carried out within the framework of APEID, thus emphasizing a vitally important current of educational thinking in this region in which education and development are viewed as integrally related. The present Meeting occurs most appropriately in the life cycle of this regional co-operative endeavour to provide an opportunity to share and learn from each other's cumulative experience. It occurs also to coincide most gratifyingly with the auspicious anniversary of our host institute, providing us with an opportunity to offer our tribute of appreciation to NIER. Incidentally, ACEID's birthday was on 1 June 1972, almost on the same date as NIER's birthday.

This Meeting is to consider educational research, not in isolation, but in relation to educational reform. I believe that the interlinking of educational reform and educational research is highly important; that is, interlinking the processes of invention, analysis and understanding and the processes of action to bring about change.

Recent decades, notably the last two decades, have witnessed in almost all the Member States in the Asian region far-ranging initiatives for reforming and even transforming education. Indeed, in many countries in the Asian region, there are cycles of educational reform, and the first cycle of reform action has been followed by a second, and in a few countries even a third, cycle of reform. The pace of change is fast and accelerating, with a single cycle of reform action now spanning 8-10 years rather than 15-20 years of the earlier decades. Not only the pace is accelerating; the scope, reach and direction of reform are much more comprehensive and are set by the developmental dimensions of the society which education serves and also reflects. One can discern broadly two patterns of educational reform action. In one pattern, educational reform is an expression or consequence of a wider pattern of development action aimed at

changing the prevailing economic and social relationships in a society. Educational reform in this context is holistic in its approach to reforming an education system in terms of its goals, processes and products. Questions of equitable educational opportunities for the underprivileged and deprived sections of the population; of education's role in national development; of the social responsibilities and obligations of education systems; of deformalizing education in order to enhance its developmental potential - questions such as these dominate education reform action which is conceived as developmental action. In the second pattern, educational reform action takes place essentially within the framework of an existing education system, and is aimed at improving the processes and outputs of the system. Quite often such change for improvement may be very extensive for example in curriculum reforms; but essentially such changes, however extensive they may be, technically do not alter the relationship of education to society. Education reform action of this pattern is for stability and continuity.

These two patterns of educational reform action should not be treated as if they wholly excluded each other. Development-based educational reform must necessarily in its course express itself also in changing the internal processes and outputs of the education system.

I would suggest that broadly speaking the first generation of education reforms as they were to be found in 1950s and early 1960s in many countries of the Asian region were conceived on the second pattern. Subsequent educational reform action as it emerged in the latter 1960s and the current decade in almost all the developing countries of the region is most clearly highlighted in its development thrust. One cannot understand the recent educational trends in one country after another of the developing region unless one sees these trends as search for new developmental roles.

The last two or three decades which are so fertile in the search for new, relevant and more authentic forms of educational reform action have also witnessed the emergence and growth of educational research and development. The coincidence of these two evolutions is not by chance. The search for relevant educational reforms is bound up with the search for the insights which educational research and development is expected to yield in the conception and realization of such reforms in educational action. In the developing countries of the region, this search furthermore has also been activated powerfully by shortage of resources. The usual resources being in short supply even while the educational needs and aspirations are rising, innovations become a necessity of thought and action.

While it cannot be claimed that educational research and development has kept pace with educational reform action and with the problems arising from it, there are discernible some striking phases in the evolution of educational research in the region. There is a certain parallelism between educational research and educational reform action. In the earliest phase, educational research was a replication of work done elsewhere in a different contextual situation, with consequent low relevance and applicability. It is difficult to see other than intellectual barrenness in that phase. That landscape began to change basically when educational reform action moved towards more comprehensiveness. Educational research in the traditional form could offer little in the conception and development of such educational reform action. It was influenced more profoundly by the insights drawn from other disciplines than pedagogy. The multi-disciplinary basis of educational research is coming increasingly into prominence. Another consequence was a growing recognition that educational research has to be diversified so as to encompass different forms of educational reform action - educational policy making and planning as much as curriculum development; community action in education as much as teacher action, and

so on. The third characteristic of the evolving situation is the growing emphasis on problem orientation and relevance. It will be noticed that in most countries of the region, educational R & D activities are clustered most at points at which the concepts embodied in an educational reform are to be translated into responsive educational action for example development of a new curriculum or new educational structures.

This Meeting brings together a unique wealth of experiences in educational reform and educational research encompassing a rich variety of conditions. My colleagues from Unesco, from HQs and from the Regional Office, look forward to useful and productive sessions of reflection and discussion, knowing that the problems which the countries have in common and to which they are seeking solutions through educational development are of profoundest import for the well being and progress of millions of people in this continent. I wish once again to thank the distinguished participants and our generous host institution.